

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application.

1. (Currently Amended) A system for filtering and distributing routes to sites in a virtual private network, the routes being used by a router to forward packets[of route target filtering], comprising:

an import filter receiving a plurality of routes from a route distributor, the plurality of routes having a route distinguisher, a route target, and a next hop routing information, the import filter accepting a first subset of the routes according to an import target policy; and

a re-export filter receiving the plurality of routes from the route distributor, the re-export filter modifying the next hop information of a second subset of the routes, and distributing the modified routes.

2. (Original) The system as set forth in claim 1, wherein the re-export filter modifies the next hop information to be the address of a router serving as a firewall of a network.

3. (Original) The system, as set forth in claim 1, wherein the re-export filter modifies the next hop information to be the address of a firewall of a virtual private network.

4. (Original) The system, as set forth in claim 1, wherein the re-export filter comprises a mask, a value for comparison with the route, and an action to take in response to a match between the route and the comparison value.

5. (Canceled)

6. (Currently Amended) A network, comprising:

a hub node;

a plurality of spoke nodes in communications with one another via the hub node; and the hub node including:

an import filter receiving a plurality of routes from a route distributor, the routes being used by a router to forward packets, the plurality of routes having a route distinguisher, a route target, and a next hop routing information, the import filter accepting a first subset of the routes according to an import target policy; and

a re-export filter receiving the plurality of routes from the route distributor, the re-export filter modifying the next hop information of a second subset of the routes, and distributing the modified routes.

7. (Original) The network, as set forth in claim 6, wherein the re-export filter modifies the next hop information to be the address of the hub node.

8. (Original) The network, as set forth in claim 6, wherein the re-export filter modifies the next hop information to be the address of the hub node serving as a firewall for the network.

9. (Original) The network, as set forth in claim 6, wherein the re-export filter modifies the next hop information to be the address of the hub serving as a firewall of a virtual private network.

10. (Original) The network, as set forth in claim 6, wherein the re-export filter comprises a mask, a value for comparison with the route, and an action to take in response to a match between the route and the comparison value.

11. (Canceled)

12. (Original) The network, as set forth in claim 6, wherein the hub node is a customer edge device coupling a site to a provider network.

13. (Currently Amended) A method for filtering and distributing routes to sites in a virtual private network, the routes being used by a router to forward packets, comprising:

receiving a plurality of routes each having a route distinguisher, a route target, and a next hop routing information;

accepting a first subset of the plurality of routes according to a predetermined policy;

modifying the next hop information of a second subset of the plurality of routes; and  
distributing the modified routes.

14. (Original) The method, as set forth in claim 13, wherein modifying the next hop information comprises modifying the next hop information to be the address of a router serving as a firewall of a network.

15. (Original) The method, as set forth in claim 13, wherein modifying the next hop information comprises modifying the next hop information to be the address of a firewall of a virtual private network.

16. (Original) The method, as set forth in claim 13, wherein the re-export filter comprises a mask, a value for comparison with the route, and an action to take in response to a match between the route and the comparison value.

17. (Canceled)

18. (New) The system as set forth in claim 1, wherein the re-export filter modifies the route distinguisher and the route target, and distributes the modified routes.

19. (New) The system as set forth in claim 6, wherein the re-export filter modifies the route distinguisher and the route target, and distributes the modified routes.

20. (New) The system as set forth in claim 13, wherein the re-export filter modifies the route distinguisher and the route target, and distributes the modified routes.